The Weather Weather Company

Real Time Traffic Flow - v2

Domain Portfolio: Weather Imagery | Domain: Traffic Services | API Name:Real-Time Traffic Flow - v2

Standard HTTP Cache-Control headers are used to define caching length. The TTL value is provided in the HTTP Header as an absolute time value using the "Expires" parameter. Example: "Expires: Fri, 12 Jul 2013 12:00:00 GMT".

Geography: Global

Attribution Required: NO

Attribution Requirements: N/A

Overview

The Feature Data Service (FDS) API provides geographic features for a number of products. The client can use these features to render a visual representation of data.

- FDS provides geometric vector data where each feature can be a set of points, a polygon or set of polygons, a linestring or set of linestrings, or any other valid GeoJSON type
- Each feature is described by a set of geographic coordinates and a set of properties.
- Each feature is uniquely identified by the combination of its product key, feature key and valid time; the valid time is used to assign the feature to a unique feature set.
- For additional details about FDS, please see the <u>Weather Company Data | Data Visualization Weather Imagery | Common Usage Guide</u>

Using FDS products requires a multi-step workflow to retrieve the necessary data for the specific product data request. Step 2 requires the 'time' value parameter, found in the response from Step 1.

- Step 1: Get Product Info Provides time-based labels for the feature sets that are currently available.
- Step 2: Get Features for a Single Tile Provides all geographic features for a single tile, taken from a single feature set within a specific product.

URL Construction

Step 1: Get Product Info

Required Parameters: productKey, apiKey=yourApiKey || Optional Parameters: meta, max-times https://api.weather.com/v2/vector-api/products/productKey>/info?apiKey=yourApiKey

The [/products/{productKey}/info] request provides the labels for the feature sets that are currently available. These labels are required as input for the subsequent [/products/{productKey}/features] request, and they are invoked in that request's 'time' parameter.

https://api.weather.com/v2/vector-api/products/901/info?meta=true&max-times=12&apiKey=yourApiKey

Step 2: Get Features for a Single Tile

Required Parameters: productKey, time, lod, x, y, apiKey=yourApiKey || Optional Parameters: declutter, tile-size https://api.weather.com/v2/vector-api/products/com/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/vector-api/v2/ve

The [/products/{productKey}/features] request provides a set of features for a single tile, from a particular feature set within a particular product. Each feature contains a small set of key metadata properties, including its ID and valid time, which are required as input for any subsequent [/products/{productKey}/feature-details] request, as the 'feature-id' and 'valid-time' parameters.

https://api.weather.com/v2/vector-api/products/901/features?time=1492016701805&lod=10&x=175&y=409&tile-size=256&apiKey=yourApiKey

Product Data Dictionary: 901 - Real-Time Traffic Flow

The source of the data is the INRIX Inc. Global Traffic Database. The product is an active-state product where the most recent transmission makes all previous transmissions obsolete. When a feature disappears from one transmission to the next, the client should infer the feature's cancellation or expiration.

The JSON data includes the following fields:

Field Found in the GeoJSON response, in each feature's properties field	Description
inrix.frc	 The Federal Road Classification (FRC) code indicating the reporting Traffic Message Channels (TMCs), where multiple codes are specified in a comma-delimited list: All: (Default) All road types 1: First-class roads, such as national highway networks 2: Second-class roads, such as state highway network roads 3: Third-class roads, such as state interconnecting network roads 4: Fourth-class roads, such as major connecting roads 5: Fifth-class roads, such as minor roads connecting suburbs 6: Sixth-class roads, such as destination and destination collector roads 7: Seventh-class roads, such as destination dead-end roads
inrix.speed	Current measured speed
inrix.reference	Reference speed
inrix.average	Historical average speed
inrix.travelTimeMinutes	Time required, in minutes, to travel across the TMC
inrix.speedBucket	 Unique speed bucket ID used to categorize TMC data, defining congestion as a percentage of the reference speed: 0: 0 to 18% of reference speed 1: 19 to 34% of reference speed 2: 35 to 65% of reference speed 3: 66 to 100+% of reference speed

NOTE that the notation above does *NOT* indicate fields within an object named "inrix." Instead, each field's name includes "inrix." as a prefix.